

evaluating the printing edges of the first and second layouts;

dissecting the printing edges of the first and second layouts to form a plurality of segments;

evaluating only a subset of the plurality of segments;

placing evaluation points on the subset of the plurality of segments; and

correcting only the subset of the plurality of segments.

Claim 2 is replaced with:

2. (Amended) The method of claim 1 further comprising:

identifying a first edge of the first and second layouts that will partially print on the wafer;

adding at least one dissection point to the first edge to divide the first edge into a plurality of segments;

placing a first evaluation point on a first segment of the plurality of segments that will print; and

correcting the first segment for proximity effects using the first evaluation point.

Claim 3 is replaced with:

3. (Amended) A method of correcting for proximity effects in a layout, the layout including a first layout for a trim mask and a second layout for a phase-shifting mask, the trim mask and the phase-shifting mask used to fabricate a wafer, the method comprising:

using dissection parameters to select dissection points on an edge of a polygon;

placing an evaluation point between each pair of successive dissection points on the edge; and

determining whether the edge is a last edge of the polygon,

wherein if the edge of the polygon is not a last edge, then determining whether all of the edge is printed on the wafer,

wherein if all the edge is printed, then analyzing the next edge on the polygon.

Claim 4 is replaced with:

4. (Amended) The method of claim 3, wherein if all the edge is not printed, then

adding at least one additional dissection point to the edge, thereby forming a plurality of segments; and

moving the evaluation point to an important segment of the plurality of segments.

Claim 5 is replaced with:

5. (Amended) The method of claim 4, further including determining whether any segment of the next edge will print on the wafer, wherein if not, then returning to determining whether the edge is the last edge of the polygon.

Claim 6 is replaced with:

6. (Amended) The method of claim 5, wherein if any segment of the next edge will print on the wafer, then determining whether any segment in the edge has moved as a result of a last proximity correction.

Claim 7 is replaced with:

7. (Amended) The method of claim 6, wherein if any segment has moved, then returning to using dissection parameters to select dissection points on the edge.

Claim 8 is replaced with:

c1 8. (Amended) The method of claim 7, wherein if no segment has moved, then returning to determining whether the edge is the last edge of the polygon.

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Claims 42-57 are cancelled.

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Claim 58 is replaced with:

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58. (Amended) A mask for fabricating a printed features layer, the mask including an opaque region having segments corrected for proximity effects, the segments corresponding to portions of edges in a design layer for the printed features layer, wherein:

C2 the segments are displaced from the corresponding portions in the design layer by correction distances;

the segments correspond to a subset of edges including only printing edges in the design layer, wherein proximity corrections are determined to be desirable for the subset;

the correction distances are based on analysis of amplitudes output by a proximity effects model at evaluation points on the corresponding portions of only the subset of edges.

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Claims 61-63 are cancelled.